IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): Mixture A mixture for preparing transparent plastics, encompassing comprised of

a) a prepolymer prepared from compounds of the formula (I) and (II)

$$\begin{array}{c}
R^{1} \\
S \\
R^{2}
\end{array}$$

where each R^1 , independently of the others, is hydrogen or a methyl radical, each R^2 , independently of the others, is a linear or branched, aliphatic or cycloaliphatic radical, or a substituted or unsubstituted aromatic or heteroaromatic radical, and each of m and n, independently of the others, is a whole number greater than or equal to 0, where m + n > 0, and

from alkyl dithiols or from polythiols, preferably compounds of the formula (III), HS-R³-SH (III)

where R³, identical with or different from R², can be as defined for R², and

- b) at least one monomer (A) capable of free-radical polymerization and having at least [[2]] two methacrylate groups, and
 - c) aromatic vinyl compounds,

d) if appropriate, a monomer selected from the group consisting essentially of a monomer capable of free-radical polymerization and having at least two terminal olefinic groups whose reactivity differs, and/or

e) if appropriate, at least one ethylenically unsaturated monomer (B) and mixtures thereof.

Claim 2 (Currently Amended): Mixture A mixture according to Claim 1, eharacterized in that it comprises comprising more than 10 mol%, of compounds of the formula (II) where m + n = 2 based on the total amount of the compounds of the formula (II), (II) and (III), of compounds of the formula (II) where m + n = 2 (I), (II) and compounds from alkyl dithiols or from polythiols.

Claim 3 (Currently Amended): Mixture A mixture according to any of the preceding elaims Claim 1, characterized in that comprising the radical R² of the formulae (I) and/or (II) is an aliphatic radical having from 1 to 10 carbon atoms.

Claim 4 (Currently Amended): Mixture A mixture according to any of the preceding elaims Claim 1, characterized in that the mixture comprises comprising more than 5.8 mol% of compounds of the formula (II) where m+n=3, based on the total amount of the compounds of the formula (I) and (II), and (III), of compounds of the formula (I), (II) and compounds from alkyl dithiols or from polythiols.

Claim 5 (Currently Amended): Mixture A mixture according to any of the preceding claims Claim 1, characterized in that the mixture comprises comprising from 0.1 to 50 mol% of compounds of the formula (I), based on the total amount of the compounds of the formula

(I), (II), and (III) (II) and compounds from alkyl dithiols or from polythiols of compounds of the formula (I).

Claim 6 (Currently Amended): Mixture A mixture according to any of the preceding elaims claim 1, characterized in that the mixture comprises comprising from 1 to 40 mol% of compounds of the formula (II) where m + n = 1, based on the total amount of the compounds of the formula (I), (II), and (III) (I), (II) and compounds form alkyl dithiols or from polythiols, of compounds of the formula (II) where m + n = 1.

Claim 7 (Currently Amended): Mixture A mixture according to any of the preceding elaims Claim 1, characterized in that the mixture comprises comprising compounds of the formula (II) where m + n > 3.

Claim 8 (Currently Amended): Mixture A mixture according to any of the preceding elaims Claim 1, characterized in that wherein the total content of compounds of the formula (I), (II), and (III) (II), (II) and compounds form alkyl dithiols or from polythiols is at least 5.0% by weight, based on the total weight of the mixture.

Claim 9 (Currently Amended): Mixture A mixture according to any of the preceding elaims Claim 1, characterized in that wherein the mixture comprises at least one monomer (A) which is copolymerizable with the prepolymers prepared from the monomers of the formulae (I), (II) and (III) formulas (I), (II) and compounds from alkyl dithiols or from polythiols.

Claim 10 (Currently Amended): Mixture A mixture according to Claim 9, eharacterized in that wherein the mixture encompasses further comprises di(meth)acrylates.

Claim 11 (Currently Amended): Mixture A mixture according to the preceding elaims Claim 1, characterized in that wherein the aromatic vinyl compounds present in the mixture preferably comprise styrene.

Claim 12 (Currently Amended): Mixtures A mixture according to Claim 1, eharacterized in that it comprises further comprising a monomer capable of free-radical polymerization and having at least two terminal olefinic groups whose reactivity differs, of the general formula

$$Y O R^{18} O Y$$

$$R^{19} O Y$$

$$R^{19} O Y$$

$$R^{19} O Y$$

where

the radical R¹⁹ at opposing ends of the molecule represented by the formula (XII) is the same or different and is selected from the group consisting essentially of independently a hydrogen atom, a fluorine atom, and/or and a methyl group,

the radical R¹⁸ is a connecting group which preferably encompasses from has from 1 to 1000, in particular from 2 to 100, carbon atoms,

the radical Y is a bond or a connecting group having from 0 to 1000 carbon atoms, in particular from 1 to 1000 carbon atoms, and preferably from 1 to 100 carbon atoms.

Claim 13 (Currently Amended): Mixtures A mixture according to Claim 12, characterized in that they comprise further comprising allyl polyethylene glycol methacrylate.

Claim 14 (Currently Amended): Mixtures A mixture according to Claim 1, eharacterized in that they comprise further comprising at least one ethylenically unsaturated monomer (B), preferably methacrylate.

Claim 15 (Currently Amended): <u>Mixtures A mixture</u> according to Claim 14, <u>wherein</u>

(B) characterized in that they comprise comprises 2-hydroxyethyl methacrylate.

Claim 16 (Currently Amended): Process A process for preparing a transparent plastics, characterized in that a mixture according to any of the preceding claims is polymerized plastic comprising polymerizing the mixture of Claim 1.

Claim 17 (Currently Amended): Transparent A transparent plastic obtainable via a prepared by the process of according to Claim 16.

Claim 18 (Currently Amended): Plastic A plastic according to Claim 17, eharacterized in that wherein the refractive index of the plastic to DIN 53491 is greater than 1.59.

Claim 19 (Currently Amended): Plastic A plastic according to Claim 17 or 18, eharacterized in that wherein the Abbe number of the plastic to DIN 53491 is greater than 36.

Claim 20 (Currently Amended): Plastic A plastic according to any of Claims Claim 17 to 19, characterized in that wherein [[the]] an average diameter of [[the]] a ball which does not damage the test specimen in [[the]] a falling ball test is ≥ 18 .

Claim 21 (Currently Amended): Plastic A plastic according to any of Claims Claim 17 to 20, characterized in that wherein the transmittance of the plastic to DIN 5036 is ≥ 89%.

Claim 22 (Currently Amended): Plastic A plastic according to any of Claims Claim 17 to 21, characterized in that its wherein the glass transition temperature is greater than 80.0°C.

Claim 23 (Currently Amended): Use of A method of using the high-transparency plastic according to any of Claims Claim 17 to 22 as an optical lens.

Claim 24 (Currently Amended): Optical, An optical in particular ophthalmic, lens comprising a transparent plastic according to at least one of Claims Claim 17 to 22.